ional Application No PCT/GB2004/001639

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07C29/42 C07C33/04 C07C31/20 C07C33/044 CO7C33/035

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 CO7C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, WPI Data, PAJ, BEILSTEIN Data, CHEM ABS Data

ategory °	Citation of document, with indication, where appropriate, of ti	Relevant to claim No.	
Υ	WO 02/094741 A (CARREIRA ERICK ADGER BRIAN MICHAEL (GB); ICI 28 November 2002 (2002-11-28) the whole document	1-10	
Y	FRANTZ D E ET AL: "FACILE ENANTIOSELECTIVE SYNTHESIS OF ALCOHOLS BY DIRECTADDITION OF ALKYNES TO ALDEHYDES" JOURNAL OF THE AMERICAN CHEMIC AMERICAN CHEMICAL SOCIETY, WAS US, vol. 122, 1 March 2000 (2000-01806-1807, XP000931149 ISSN: 0002-7863 the whole document	1-9	
χ Furti	ner documents are listed in the continuation of box C.	Patent family members are liste	d in annex.
"A" docume consid "E" earlier of filing d "L" docume which citation "O" docume other r	tegories of cited documents: ent defining the general state of the art which is not lered to be of particular relevance document but published on or after the international late ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another no or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or neans ent published prior to the international filing date but an the priority date claimed	 "T* later document published after the interpretation or priority date and not in conflict with cited to understand the principle or invention "X* document of particular relevance; the cannot be considered novel or can involve an inventive step when the "Y* document of particular relevance; the cannot be considered to involve an document is combined with one or ments, such combination being obtain the art. "&* document member of the same pate 	the application but theory underlying the claimed invention not be considered to document is taken atone e claimed invention inventive step when the more other such documions to a person skilled
Date of the	actual completion of the international search	Date of mailing of the international s	earch report
2	August 2004	12/08/2004	
lame and r	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Lorenzo Varela,	M.J.

ir ional Application No PCT/GB2004/001639

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Calegory	Citation of document, with indication, where appropriate, of the recevant passages	relevant to Gallin No.
Ý	BOYALL D ET AL: "Enantioselective addition of 2-methyl-3-butyn-2-ol to aldehydes: preparation of 3-hydroxy-1-butynes" ORGANIC LETTERS, ACS, WASHINGTON, DC, US, vol. 2, no. 26, 28 November 2000 (2000-11-28), pages 4233-4236, XP002207131 ISSN: 1523-7060 the whole document	1-10
Y	BURK M J ET AL: "Highly enantioselective hydrogenation of beta-keto esters under mild conditions" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, DC, US, vol. 117, no. 15, 19 April 1995 (1995-04-19), pages 4423-4424, XP002207132 ISSN: 0002-7863 the whole document	1-9
Υ	BACH J ET AL: "Stereoselective Reduction of Unsaturated 1,4-Diketones. A Practical Route to Chiral 1,4-Diols" TETRAHEDRON LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 38, no. 6, 10 February 1997 (1997-02-10), pages 1091-1094, XP004033941 ISSN: 0040-4039 the whole document	1-9
Υ	WU K-M ET AL: "Structural effects on Ä1,5Ü-sigmatropic hydrogen shifts of vinylallenes" JOURNAL OF ORGANIC CHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, US, vol. 55, no. 14, 6 July 1990 (1990-07-06), pages 4381-4392, XP002207137 ISSN: 0022-3263 the whole document	1-9
Υ	US 5 110 966 A (EVANS JONATHAN C ET AL) 5 May 1992 (1992-05-05) the whole document	1–9
Y	DATABASE BEILSTEIN 'Online! BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY, FRANKFURT-MAIN, DE; 1990, XP002289664 retrieved from XFIRE accession no. RID2868854 abstract	1-9
i	-/	·

tr ional Application No
PCT/GB2004/001639

		FC1/682004/0	PCT/GB2004/001639		
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Rel	Relevant to claim No.		
Υ	DATABASE BEILSTEIN 'Online! BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY, FRANKFURT-MAIN, DE; 1933, XP002289665 retrieved from XFIRE accession no. RID636078 abstract		1-9		
Y	DATABASE BEILSTEIN 'Online! BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY, FRANKFURT-MAIN, DE; 1962, XP002289666 retrieved from XFIRE accession no. RID1229231 abstract	·	1-9		
Y	DATABASE BEILSTEIN 'Online! BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY, FRANKFURT-MAIN, DE; 1989, XP002289667 retrieved from XFIRE accession no. RID2868243 abstract		1-9		

In onal Application No
PCT/GB2004/001639

							,
	Patent document cited in search report		Publication date		Patent family member(s)		Publication date
	WO 02094741	Α	28-11-2002	CA	2448183	A1	28-11-2002
1				EP	1389174	A1	18-02-2004
1				WO	02094741	A1	28-11-2002
				US	2004143143	A1	22-07-2004
	US 5110966	Α	05-05-1992	AT	147393	 T	15-01-1997
1				AU	659847		01-06-1995
				AU	1998492	Α	25-01-1993
				CA	2109954	A1	07-01-1993
			•	DE	69216611	D1	20-02-1997
				DE	69216611	T2	22-05-1997
				DK	589965	T3	27-01-1997
				ΕP	0589965	A1	06-04-1994
1	,			ES	2099264	T3	16-05-1997
1	•			FΙ	935699	Α	17-12-1993
1				GR	3022417	T3	30-04-1997
i	•			HU	69764	A2	28-09-1995
1				ΙE	922006	A1	30-12-1992
				JP	6508631	T	29-09-1994
				KR	220877	B1	01-10-1999
				NO	934676	Α	17-12-1993
1				NZ	243155	Α	25-03-1994
1				WO	9300347	A1	07-01-1993
				US	5157167	Α	20-10-1992
)							